

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-010269**Date Inspected:** 14-Nov-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Chen Ying Xin**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

Bay 11 Tower Strut Plate

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% and random Visual Testing (VT) of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT reports for this date. The members are identified as Tower Components. The weld designations reviewed are as follows.

WD1-A6003-3

Bay 11 East Tower Lift 5 skin E

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT reports for this date. The members are identified as Tower Components. The weld designations reviewed are as follows.

ESD1-TL5-2C/F-7B

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Bay 11 West Tower Lift 5 skin E

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT reports for this date. The members are identified as Tower Components. The weld designations reviewed are as follows.

WSD1-TL5-4C/F-8B

Bay 11 Skirt Plate

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% and random Visual Testing (VT) of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT reports for this date. The members are identified as Tower Components. The weld designations reviewed are as follows.

ESD1-A65B/B-1-1, 2

ESD1-A65B/B-2-1 (MT LINEAR INDICATION OBSERVED)

ESD1-A65B/B-2-2

ESD1-A65B/B-3-1, 2

ESD1-A65B/B-4-1, 2

ESD1-A65B/B-5-1, 2

ESD1-A65B/B-6-1, 2

ESD1-A65B/B-7-2 (MT LINEAR INDICATION OBSERVED)

This Quality Assurance (QA) Inspector observed the following work in progress:

Bay 10

SMAW welding of weld joint 7A/B (Repair) located on ED1-A6003-4.

Welder is identified as 040582. ZPMC CWI is identified as Mr. Chen Ying Xin.

The welding variables recorded by QC appeared to comply with WPS-485-SMAW-2G(2F)-FCM-REPAIR-1.

SAW welding of weld joint 1A located on ND1-SA3-16-109M-1.

Welder is identified as 052917. ZPMC CWI is identified as Mr. Chen Ying Xin.

The welding variables recorded by QC appeared to comply with WPS-B-T-3221-Tc-U5-S-1.

FCAW welding of weld joint 1A located on SSD1-SPSA4-15.

Welder is identified as 053869. ZPMC CWI is identified as Mr. Gong Liang Zhu.

The welding variables recorded by QC appeared to comply with WPS-B-T-2232-B-U5-F.

SAW welding of weld joint 3B located on NSD1-TL5-3E-F.

Welder is identified as 0209051. ZPMC QC is identified as Jiang La Mei.

The welding variables recorded by QC appeared to comply with WPS-B-T-3221-B-U3c-S-1.

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## WELDING INSPECTION REPORT

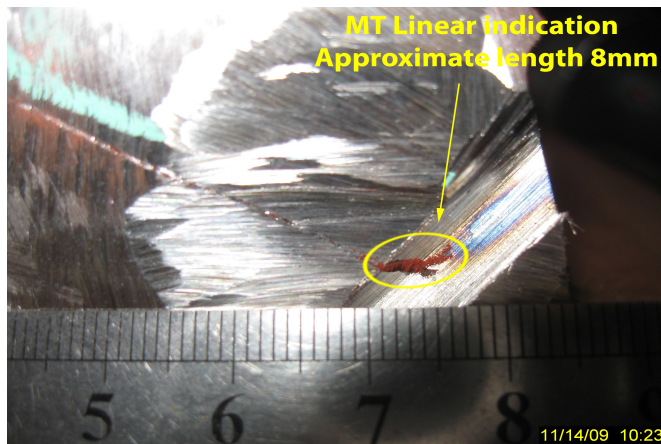
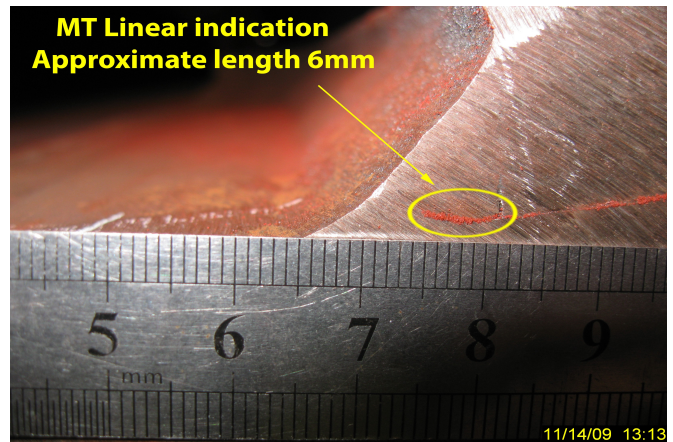
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During random verification Magnetic Particle Testing (MT) of Skirt plate, weld ESD1-A65B/B-2-1, ESD1-A65B/B-7-2 located in the Tower bay no. 11, Caltrans Quality Assurance (QA) Inspector discovered linear indications of approximately 8mm and 6mm in length respectively. This area had been previously tested and accepted by ZPMC NDT personnel. (NDT Inspection Notification sheet # 004631, 004632)

The attached photographs provide additional detail.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



### Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod 134-8257-0045, who represents the Office of Structural Materials for your project.

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**Inspected By:** Gaikwad,Umesh

Quality Assurance Inspector

**Reviewed By:** Clifford,William

QA Reviewer